

Moisture uptake in rain exposed wood joints

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Status: finished

Rain exposed wood structures are degraded by decay fungi if the moisture and temperature conditions are favourable for the fungi. Wood close to joints is especially exposed since the water can be held here after rain or drying because drying is hindered. In this project the moisture conditions in such critical points was studied in laboratory. Microclimate and moisture content were measured for three different joint types and the distance between the two boards in the joint was varied in order to create different microclimates.

Water was not held in gaps if a distance of 5 mm was used between the boards. In some cases, a gap of 5 mm also gave lower moisture contents in the wood, but in other cases the influence was small or non. Both heartwood and sapwood and fast grown and slow grown wood of Norway spruce (*Picea abies* L. Karst.) was used. The moisture content was generally lower for the heartwood specimens than the sapwood specimens but no difference was seen between the fast grown and the slow grown wood since the density was similar.



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Publications

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